

Licensing Guide for Operators of Wastewater Facilities

Licensing of Sewage Works Operators,
O. Reg. 129/04
made under the Ontario Water Resources Act

November 1, 2004

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Ontario Ministry of the Environment

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1 Introduction

1.1 Purpose of Operator Licensing Guide

This wastewater operator licensing guide provides information on the requirements to secure and renew a wastewater licence. It reflects the new Licensing of Sewage Works Operators regulation, O. Reg. 129/04, made under the *Ontario Water Resources Act* (OWRA), which replaces O. Reg. 435/93.

This wastewater operator licensing guide is provided for information purposes only. Where there is a discrepancy between this guide and O. Reg. 129/04, the regulation prevails. Owners and operators should refer to O. Reg. 129/04 and the OWRA for a complete understanding of their legal responsibilities and operator licensing compliance requirements.

1.2 Program Mandate and History

One of the ministry goals is to protect the safety of drinking water and the broader aquatic environment. The Water/Wastewater Operator Certification Program contributes to this goal by certifying operators of drinking water and wastewater systems as having met professional standards related to education, annual training, experience, and knowledge. These professional standards ensure that these systems are operated by knowledgeable and experienced operators.

The operator certification program began as a voluntary program in 1986/87 introduced by the ministry, the Municipal Engineers Association, and Metro Toronto. The voluntary program was intended as a bridge to allow time to work out the details of a mandatory program in consultation with stakeholders, including professional organizations and bargaining units.

The operator certification program became a mandatory program in 1994 with the coming into effect of O. Reg. 435/93, made under the *Ontario Water Resources Act*. Drinking and wastewater operators have been governed under O. Reg. 435/93 until the coming into effect of O. Reg. 128/04 and O. Reg. 129/04 on August 1, 2004.

Ontario is a member of the North American Association of Boards of Certification (ABC). The Association supports certification by establishing common standards and practices that are then adopted by jurisdictions across North America. ABC also maintains a question bank for operator certification exams, which question bank is used by other Canadian provinces.

1.3 Operator Licensing Program Administered by a Third Party

The wastewater operator licensing program is administered by a third party under contract with the ministry. Presently the third party is the Ontario Environmental Training Consortium (OETC).

Among other things the Certification Administrator processes licence and licence renewal applications, processes licence exam applications, co-ordinates and marks exams, notifies operators of the need to renew their licence, sells exam study guides, informs operators about continuing education courses that meet the necessary criteria for the licensing program, and provides general information to operators about the program.

Details on how to contact the OETC are provided in section 10 of this guide.

1.4 Separate Guide to Completing Wastewater Licensing Forms

Supplementary to this certification guide is a '*Guide to Completing Ministry of Environment Water and Wastewater Operator Certification and Facility Classification Forms*', which can be found on the website of the Certification Administrator. The guide to completing forms contains a list of all the forms related to wastewater facility classification and operator licensing and licence renewal, and provides instructions on when and how to complete specific forms. (The forms can also be found on the website of the Certification Administrator).

1.5 New Drinking Water Operator/Water Quality Analyst Certification Guide

The ministry developed a new regulation for operators and water quality analysts of drinking water systems, O. Reg. 128/04, under the *Safe Drinking Water Act, 2002*. For information on this regulation, please refer to the Certification Guide for Operators and Water Quality Analysts of Drinking Water Systems, dated August 1, 2004. It can be found on the website of the Certification Administrator (see Section 10 for contact information) or on MOE's website at www.ene.gov.on.ca

1.6 Tips on Reading this Guide

O. Reg. 129/04 came into effect August 1, 2004.

The reference to Director throughout the regulation is reference to a person or persons appointed by the Minister of the Environment as having the authority to make such decisions. The Director under O. Reg. 129/04 and O. Reg. 128/04 is the director of the

Education and Outreach Branch, Drinking Water Management Division, Ministry of the Environment.

The meaning of key terms used in this guide is set out in shaded text within the section in which the term is used. For exact legal definitions of terms please refer to the regulation and the OWRA.

Policy that supplements O. Reg. 129/04 is contained in separate guidelines, and can be obtained from the Certification Administration Office (see section 10 of this guide for contact information). However, in some instances part of the policy has been included in this guide, in boxes within the relevant section.

1.7 *Key Differences in Wastewater Licensing Requirements between O. Reg. 129/04 and O. Reg. 435/93*

Under O. Reg. 129/04 the licensing requirements for operators of wastewater facilities remain the same as under O. Reg. 435/93.

However, there are some administrative differences between O. Reg. 129/04 and O. Reg. 435/93, as follows:

- improved the structure by creating more headings
- changed the term ‘operator in overall responsibility’ to ‘overall responsible operator’
- overall responsible operator must now be ‘designated’
- consolidated the definition of operator-in-charge in one section
- made explicit that operators-in-training cannot be an operator-in-charge
- clarified that the one-year experience required to secure Class I wastewater operator licence is experience gained as an operator-in-training
- removed fees from the regulation – fees now set through minister’s order

1.7.1 New Fees

The Minister has set new fees for operators of wastewater facilities, which came into effect August 1, 2004. These new fees reflect that wastewater operator licensing fees have not changed since 1987, and will help to cover the administrative costs of the program.

2 Facilities Governed by O. Reg. 129/04

O. Reg. 129/04 applies to:

- a. a sewage works that requires a certificate of approval from the ministry under section 53 of the OWRA and that is owned or operated by the Crown or a municipality, if the sewage received by the sewage works is treated; and

- b. a sewage works that requires a certificate of approval from the ministry under section 53 of the OWRA and that is not owned or operated by the Crown or a municipality, if any sewage received by the sewage works is:
 - toilet, sink or culinary liquid waste, or
 - other sewage of a kind normally discharged from a residential subdivision other than storm water, ground water, surface drainage or land drainage.

Exception: this regulation does not apply to a sewage works from which sewage is not to drain or be discharged directly or indirectly into a ditch, drain or storm sewer or a well, lake, river, pond, spring, stream, reservoir or other water or watercourse if:

- the sewage works has a design capacity in excess of 10,000 litres per day;
- more than one sewage works are located on a lot or parcel of land and they have, in total, a design capacity in excess of 10,000 litres per day; or
- the sewage works is not located wholly within the boundaries of the lot or parcel of land on which is located the residence or other building or facility served by the works.

The exception covers septic systems. If the system has a design capacity of less than 10,000 litres per day, it is covered under the Building Code. If the system is in excess of 10,000 litres per day, it does require a Certificate of Approval from the ministry, but not a licenced operator unless specified in the Certificate of Approval.

A wastewater collection system that is located on private property is considered a plumbing system. Plumbing systems do not require classification nor licenced operators.

2.1 Facility Classification

Sewage works are to be operated by persons holding a valid operator's licence of the same type as the type of facility. At least one operator must hold a licence of the same class or a higher class than the class of the facility. Thus a first step in deciding what certificate an operator should hold is to have the facility classified.

Sewage works are divided into two types of facilities:

1. wastewater collection facility

A wastewater collection facility means a sewage works that collects or transmits sewage but does not treat or dispose of sewage.

2. wastewater treatment facility

A **wastewater treatment facility** means a sewage works that treats or disposes of sewage but does not collect or transmit sewage.

Each facility will receive a classification of Class I, Class II, Class III, or Class IV, depending on the classification points for facility characteristics found in Schedule I of O. Reg. 129/04. The larger the facility and the more complex and sophisticated the operations, the higher the class assigned to the facility.

The owner of a new wastewater facility must file an application with the Director to have their facility classified. The owner must apply for reclassification of their facility if their facility has been altered, extended or replaced so that it no longer meets the criteria in Schedule I.

As well, the Director may require owners to have their facility reclassified if there are any changes to the facility classification rules.

2.2 *Existing Certificates of Facility Classification*

A valid wastewater treatment facility certificate of classification under O. Reg. 435/94 is considered a valid wastewater treatment certificate of classification under O. Reg. 129/04.

Similarly, a valid wastewater collection facility certificate of classification under O. reg. 435/93 is considered a valid wastewater collection facility certificate of classification under O. Reg. 129/04.

3 Licensing of Operators

For each type of facility, there are four corresponding operator licences: Class I, Class II, Class III and Class IV.

There is also an operator-in-training licence for each type of facility.

An **operator** means a person who adjusts, inspects or evaluates a process that controls the effectiveness or efficiency of a facility, and includes a person who adjusts or directs the flow, pressure or quality of wastewater within a wastewater collection facility.

The owner is required to ensure that every operator employed in their facility holds a licence applicable to that type of facility. This includes employees whose primary duties are other than performing operating functions, such as a maintenance worker or laboratory technician, but who may be placed on call and expected to perform operating functions when 'called on'.

‘Operating’ functions are those functions typically performed by an operator described in the definition of ‘operator’ above.

A non-licenced person, such as a contractor, may perform operating functions under the direct supervision of a licenced operator. This means the licenced operator must be physically present to observe the work being done, and instruct as needed.

To secure a licence a person must apply to the Director and meet specific qualifications.

3.1.1 Exception – Professional Engineer

An owner can employ a professional engineer or series of engineers who do not hold a wastewater operator licence, as an operator, for up to six months in a 12 month period.

A **professional engineer** means a professional engineer as defined in the *Professional Engineers Act*.

3.2 Licence Qualifications – Operators-in-Training

Operators typically begin their career operating a wastewater facility as an operator-in-training. An operator-in-training (OIT) licence enables a person to gain the one year of experience required to become a Class I operator. To secure an OIT licence for a wastewater treatment or collection facility, a person must:

- successfully complete grade 12 or have the equivalent (see section 3.3 for grade 12 equivalency)
- pass an OIT or Class I exam for that type of facility (e.g. wastewater treatment or wastewater collection).

An OIT licence allows the operator to perform all regular operating functions. However, an OIT cannot be designated as the overall responsible operator, nor as an operator-in-charge.

3.3 Licence Qualifications: Class I to IV Licences

Operators wishing to secure a Class I, II, III or IV licence must meet specific requirements related to education, experience, and passing an exam as shown in the following table.

Certificate	Education/ Training <i>(also see Notes 1,23 & 5)</i>	Experience <i>(also see Notes 3,4,6, 7& 8)</i>	Exam	Other <i>(also see Note 9)</i>
OIT	Grade 12 or equivalent	N/A	70% OIT exam for specific type of facility	OIT cannot be designated as ORO
Class I	Grade 12 or equivalent. Note 4 does <u>not</u> apply to a Class I licence.	1 year as an OIT. Notes 5 & 6 do <u>not</u> apply to a Class I licence.	Class I exam for that type of facility	Experience must be ‘operating’ experience –see definition above
Class II	Grade 12 or equivalent. Note 4 does <u>not</u> apply to a Class II licence.	3 years as an operator in that type of facility	Class II exam for that type of facility	Must hold a Class I licence for that type of facility
Class III	Grade 12 or equivalent + 2 years of additional education or training the Director considers relevant	4 years as an operator in that type of facility, of which 2 years must be as an OIC in a Class II, III or IV facility	Class III exam for that type of facility	Must hold a Class II licence for that type of facility
Class IV	Grade 12 or equivalent + 4 years of additional education or training the Director considers relevant	4 years as an operator in that type of facility, of which 2 years must be as an OIC in a Class III or IV facility	Class IV exam for that type of facility	Must hold a Class III licence for that type of facility

Notes to Table:

1. Grade 12 equivalency is generally that described in the box immediately following.
A more detailed description is contained in a ministry guideline.

The following is considered equivalent to having secured grade 12:

- securing a General Educational Development (GED) certificate

- a 2-3 year certificate or 3-4 year diploma from a recognized Canadian university or community college (*a certificate or diploma from a business school, design academy, or computer school are not on their own considered grade 12 equivalent, but may be considered together with other qualifications such as the high school grade level completed, other continuing education or training secured*)
- grade 12 or the GED from other provinces (CEJEP from Quebec) and the US will be considered equivalent
- education received in another country may be considered as Grade 12 equivalent (contact the Certification Administrator for details – see section 10 for contact information).

2. For the purpose of calculating education or training obtained through continuing education, 450 hours of education or training equals one year. This translates into 45 Continuing Education Units (CEU), since 1 CEU equals 10 hours of training.
3. Only operating experience gained while licenced for the work the person is doing when they are legally required to be licenced, shall be considered in determining whether the person meets the experience qualifications.
4. Experience gained as an operator-in-charge (OIC) while holding an operator-in-training licence will not be recognized as OIC experience for the purpose of securing a Class III or IV licence.
5. Substitute experience for education/training:
 - a. Class III applicants may substitute up to one year experience as an operator-in-charge in a Class II, III or IV facility, above that required to meet the experience qualifications, for one year of education/training (or 450 hours of additional education/training).
 - b. Class IV applicants may substitute up to two years of experience as an operator-in-charge in a Class III or IV facility, above that required to meet the experience qualifications, for the two years of additional education/training.
6. Substitute education/training for experience: Class II, III and IV applicants can substitute education and training (except for elementary and secondary education), above that required to meet the additional education and training qualifications for up to 50% of the required operating experience.

Eligible substitutions include:

- relevant post secondary education such as community college, trade school, university
- training that meets the ‘continuing education’ training criteria for purpose of certificate renewal

7. Substitute different experience: Class II, III and IV applicants may be permitted to substitute experience as an operator in a different facility or subsystem, experience in a facility other than as an operator, or other relevant qualifications, for licence qualifying experience. However, the Director needs to be satisfied that such experience or qualifications are relevant to the licence being applied for.

Examples of different experiences that may be considered are:

- experience gained operating a drinking water subsystem
- experience gained working in a laboratory conducting tests on drinking water or wastewater
- experience gained within a municipal wastewater facility doing electrical or mechanical maintenance, or work as a technical expert or trades person

The ratio is often 2 to 1 or 3 to 1. For example, 2 years of wastewater collection experience would be equivalent to one year of wastewater treatment experience if applying for a higher wastewater treatment licence.

(Further detail contained in ministry guideline)

8. Application of part-time experience: The application of part-time experience is defined in ministry guideline.

Generally an operator who works in a facility that does not require the operator to be at the facility full-time but does require the operator to be available full-time, will receive one year experience credit for each year employed. However, an operator working part-time in a facility requiring full-time operators will receive credit for the actual time worked.

(Further detail contained in ministry guideline)

9. In order to upgrade their licence to a Class II, III or IV licence, an operator must hold a licence one level below the level for which she or he is making application, for the same type of facility. For example, an operator applying for a Class III wastewater collection licence, must hold a Class II wastewater collection licence.

3.3.1 Experience Exemption for Professional Engineers

A professional engineer accredited in Ontario does not have to meet the experience qualifications if the professional engineer obtains a pass of 85% on the exam for the type and class of licence for which they are applying.

3.4 Existing Wastewater Operator Licences

Valid wastewater operator licences issued under O. Reg. 435/93 are considered valid licences under O. Reg. 129/04 until three years after the expiry date as it appears on the licence.

3.5 Transferability of Operator Licences

A person who holds a Class I, Class II, Class III or Class IV wastewater treatment facility operator's licence is deemed to also hold a Class I wastewater collection facility operator's licence.

3.6 Conditional Wastewater Operator Licence

A person may apply to the Director for a conditional Class I to IV operator licence. (A conditional operator-in-training licence is not available)

The Director may issue a conditional certificate if:

- the owner that employs or has offered to employ the applicant satisfies the Director that they cannot obtain the services of an operator of the type and class required under this regulation (for example, if an owner of a Class III wastewater treatment facility is unable to find an operator holding a Class III wastewater treatment licence), and
- the owner or operating authority gives both the applicant and the Director a written commitment to help the applicant comply with all the conditions of the licence, and
- the required fee is paid.

A conditional operator's licence is valid only for the facility for which it has been issued. The operator cannot use it to work in another facility. The Director may impose certain conditions in a conditional licence.

The licence expires three years after it is issued, or on an earlier date specified on the licence, but may be renewed by the Director, if the renewal requirements are met. (See Section 3.7 of this guide, Licence Renewal, below).

3.7 Licence Renewal

A wastewater operator licence expires every three years. To renew, an operator must submit a renewal application and pay the renewal fee.

Note: an operator working with an expired licence does not hold a valid licence.

Operators without operating or related experience in the five years preceding certificate renewal must pass an exam for that class of licence in order to have their licence renewed.

In general **related** experience includes a role in the wastewater or drinking water industry that enables a person to remain knowledgeable and current on wastewater treatment or collection equipment and methods.

For example, an operator who becomes a wastewater supervisor, trainer or technical expert would meet the experience requirement during the time that they are actively engaged in such role.

Other related experience could include experience as an electrical/mechanical or maintenance employee of the wastewater facility, or as a laboratory technician or scientist who tests water or wastewater.

3.8 *Replacement of Licences*

The Director may issue a replacement licence if the operator's licence has been lost or destroyed, or if the operator's name has changed and the original licence is returned to the Director. A fee will be charged.

3.9 *Operator Licence to be Displayed*

The owner of a facility must ensure that a copy of the licence of every operator employed in the facility is clearly displayed at the operator's place of work, or if this is not realistic, at the premises from which the facility is managed.

3.10 *Cancellation or Suspension of Operator Licence*

The Director may cancel or suspend a person's operator licence if one or more of the following circumstances exist:

1. the licence was obtained by fraud, deceit or the submission of an application that contained inaccurate information
2. the person has not worked as an operator during the previous five years
3. the person has been discharged from employment in a facility for gross negligence or for incompetence in the performance of his or her duties, unless the person has not yet exhausted any rights of appeal available under a collective agreement

4. the person has contravened or failed to comply with sections 18 (duties of an operator-in-charge) or 19 (record-keeping requirements) of the regulation and the contravention or failure:
 - resulted in the discharge of a pollutant into the natural environment
 - had an adverse effect on the health or safety of an individual, or
 - had an adverse effect on a process in the facility.

When a person's licence is cancelled or suspended, the Director may issue a licence of another type or class to the person if the person meets the qualifying requirements for that type and class of licence.

4 Training Requirements

The owner of a facility shall ensure that every operator employed in the facility is given at least 40 hours of training every year.

The training may include, for example, training in new or revised operating procedures, reviews of existing operating procedures, training in safety, and training on studies of information and technical skills related to environmental subjects.

The owner shall ensure that records are maintained of the training given under this section. Such records are to include the names and positions of the operators who attend the training, the date of each training session, the duration and the subjects covered. The owner shall submit copies or summaries of the records to the Director upon request.

5 Licence Examinations

5.1 Exam Application

In addition to meeting the experience and education requirements specific to the different operator licences, the applicant must also pass an exam relating to the functions performed by operators with that class of licence for that type of facility, in order to receive a licence.

Applicants may only write examinations one class higher than the class of licence that they hold.

Examination application(s) can be secured from the office of the Certification Administrator. (See Section 10 of this guide for contact information).

Exam application(s) and payment(s) must be received by the office of the Certification Administrator at least four (4) weeks prior to the examination date requested. Applicants will receive an examination confirmation letter to confirm their registration and licence eligibility requirements. Examination mark(s) will be sent by mail within 30 days of the exam date. Exam marks cannot be given over the phone.

If an applicant fails to attend a scheduled examination, without informing the Certification Office at least two weeks before the date of the exam, he/she will forfeit the exam fee. Rescheduling or canceling more than once will result in a fee of \$10.00 for each subsequent rescheduling. Rescheduling or canceling the same exam three times will also result in the loss of the exam fee.

All applicants who have canceled scheduled examination sittings must reapply to write another exam. All applicants who forfeit examination fees must submit a new cheque along with the exam application.

5.2 Locations

A list of the exam dates and locations can be found on the website of the Certification Administrator (see Section 10 of this guide for contact information).

5.3 Confirmation Letter

The Certification Office will send an examination confirmation letter. This letter will confirm the following details:

- the exam to be written (i.e. Wastewater Treatment II)
- the date and time scheduled for the exam
- location of the exam (map included)
- materials required to bring to the exam (personal photo ID and calculator)
- licence eligibility requirements (details on the documents that need to be submitted in order to have the licence issued upon passing the examination).

Following notice of having passed the exam (pass is 70%), operators and water quality analysts should submit the appropriate documentation related to other licence qualifying requirements.

6 Operating Standards for Facilities

The owner of a facility is required to ensure that every operator employed in that facility holds a licence applicable to that type of facility, or a conditional licence applicable to that particular facility.

The exception is a professional engineer, who can be employed as an operator without holding an operator licence, for a period no longer than six months.

6.1 Overall responsible operator

The owner must designate an overall responsible operator (ORO) to ensure that a knowledgeable, experienced staff person is available at all times to provide advice to all operators working within the facility, and to respond to emergencies.

An **overall responsible operator** means an operator or professional engineer who is designated as overall responsible operator of a facility under section 15 of O. Reg. 129/04

The owner of each facility must designate as overall responsible operator an operator who holds a licence for that type of subsystem and that is of the same class as or higher than the class of that facility. For example, the overall responsible operator of a Class III wastewater treatment facility must hold a Class III or Class IV wastewater treatment facility operator's licence.

To 'designate' means to appoint an operator as holding the position of overall responsible operator. It must be clear to other operators working in the facility, and to the ministry inspector, who the overall responsible operator is for each shift. The expectation is that the overall responsible operator would be identified either through recording the ORO's name in the daily log, through a memo that is posted, etc.

The intent of the regulation is that there be an ORO designated for a facility at all times. In order to achieve this goal, an owner or operating authority can designate one operator to be the ORO for particular shifts or days, and another operator as the ORO for the other shifts or days, provided there is only one ORO designated at any given time (and that whoever is designated as the ORO meets the requirements of holding a certificate for that type of facility and of the same class or higher than that facility).

The ORO may have responsibility for more than one facility provided it does not affect their ability to perform their responsibilities.

The ORO can be off-site; however, he or she must be able to respond immediately and effectively to an emergency at the site.

If a designated overall responsible operator holding the proper qualifications is absent or unable to act, the owner may designate as overall responsible operator an operator who holds a licence applicable to that type of facility and not more than one class lower than

the class of facility – also referred to as the ‘backup’ ORO. (For example, if the overall responsible operator for a Class IV wastewater collection facility is absent, an operator holding a Class III wastewater collection facility licence can be designated).

Owners can only rely on “backup” overall responsible operators for up to 150 days in any 12-month period. The Director can make an exception if the Director is satisfied that the owner cannot reasonably hire an operator holding a class of licence as high or higher than the class of facility. The Director must also be satisfied that extending the time period will not result in a significant risk to human health or the natural environment.

An operator-in-training cannot be designated as the overall responsible operator.

6.1.1 Professional Engineer as ORO

A professional engineer who does not hold a wastewater operator licence may be designated as overall responsible operator for a period not longer than six months.

6.2 Operator-in-Charge

The owner of a facility or a person authorized by the owner must designate one or more licenced operators as operators-in-charge of the facility.

An **operator-in-charge** means an operator or professional engineer who is designated as an operator-in-charge of a facility under section 17 of O. Reg. 129/04.

An operator-in-charge can be any operator, except an operator-in-training. An operator-in-charge can be an operator holding a conditional certificate issued by the Director.

The owner or a person authorized by the owner must ensure that records are maintained of the amount of time each operator works as operator-in-charge.

6.2.1 Professional Engineers as Operator-in-Charge

The owner can also designate a professional engineer who does not have an operator’s licence, as operator-in-charge. However, the owner can only rely on a professional engineer or series of professional engineers to be the operator-in-charge for up to 180 days in any 24-month period.

A **professional engineer** means a professional engineer as defined in the *Professional Engineers Act*.

6.2.2 Duties of Operator-in-Charge

An operator-in-charge is authorized to:

- ✓ set operational parameters for the facility or for a process that controls the effectiveness or efficiency of the facility; and
- ✓ direct or instruct operators in the facility.

The operator-in-charge shall:

- take all steps reasonably necessary to operate the processes within his or her responsibility in a safe and efficient manner, in accordance with the relevant operations manuals
- ensure that the processes within his or her responsibility are measured, monitored, sampled and tested in a manner that permits them to be adjusted when necessary
- ensure that records are maintained of all adjustments made to the processes within his or her responsibility, and
- ensure that all equipment used in the processes within his or her responsibility is properly monitored, inspected and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift.

The main purpose of creating an operator-in-charge (OIC) position is to ensure that operators securing a higher class of licence have had the experience and responsibility reflected in the duties of an OIC. For example, to secure a Class III or IV licence, the operator must have a specific number of years of experience as an OIC.

6.3 Strikes and Lock-Outs

During a strike or a lockout involving operators employed in a facility, the Director may direct that the facility be allowed to operate without the presence of an overall responsible operator or operator licenced for that type of facility. However, the Director must be satisfied the facility can be operated without risk to human health or the natural environment.

To assist the Director in making such determination, the owner must submit a 'strike plan' containing specific information. Details on the information required can be secured from the office of the Certification Administrator.

6.4 *Recordkeeping re: Operation of Facility*

The owner must ensure that logs or other forms of record-keeping are available to record information about the operation of the facility.

Entries into such records must be made chronologically. Entries can only be made by the operator-in-charge, or by a person authorized to do so by the owner or operator-in-charge. The person who makes the entry must be clearly identified on the record.

The operator-in-charge or a person authorized by the operator-in-charge must record the following information on each operating shift:

- the date, the time of day the shift began and ended, and the number or designation of the shift
- names of all operators on duty during the shift
- any departures from normal operating procedures that occurred during the shift, and the time they occurred
- any special instructions that were given during the shift to depart from normal operating procedures, and the person who gave the instructions
- any unusual or abnormal conditions that were observed in the facility during the shift, any action that was taken and any conclusions that were drawn from the observations; and
- any equipment that was taken out of service or ceased to operate during the shift, and any action taken to maintain or repair equipment during the shift.

The owner must ensure that all logs and other record-keeping methods are accessible at the facility for at least two years after each entry in it was made.

6.5 *Operators and Maintenance Manuals*

The owner shall ensure that operators and maintenance personnel have ready access to comprehensive operations and maintenance manuals that contain the plans, drawings and process descriptions necessary for the safe and efficient operation of the facility.

The owner shall ensure that the manuals are reviewed and updated at least once every two years.

7 Owner

Owners have been assigned specific responsibilities under O. Reg. 129/04 as listed below.

Responsibilities
File an application for facility classification or reclassification
Ensure the certificate of facility classification is displayed in workplace
Ensure that every operator employed in the facility holds a licence applicable to that facility, or a conditional licence
Ensure that a copy of the licence of every operator in their employ is displayed at the workplace of the operator, or if this is not practical, then at the premises from which the workplace is managed
Designate an overall responsible operator (ORO); notify Director if relying on section 15 (2) ('back-up' ORO) for 60 days in any 12 month period
Designate one or more operators as operators-in-charge
Ensure that records are maintained of the amount of time each operator works as an operator-in-charge
Ensure that logs or other record-keeping mechanisms are provided to record information concerning the operation of the facility; authorize persons to make entries in log or other record keeping mechanism
Ensure that logs and other record-keeping methods are accessible in the facility for at least 2 years after each entry in it is made
Ensure that operators and maintenance personnel have ready access to operations and maintenance manuals that contain plans, drawings, and process descriptions sufficient for the safe and efficient operation of the facility
Ensure that the manuals are reviewed and updated at least once every two years
Ensure that every operator employed in their facility is given 40 hours of training each year
Keep records of the training operators receive, containing specific information, and submit copies of summaries to the Director when requested to do so.

8 Fee Schedule

The fees related to the wastewater operator licensing program are shown in the Table below. These fees came into effect August 1, 2004, except for the facility classification fee which comes into effect August 1, 2005.

The table includes fees to be paid by:

- ✓ operators of both wastewater and drinking water systems
- ✓ water quality analysts
- ✓ owners (for facility classification), and
- ✓ course providers (to have their course assessed as meeting the education and training requirements)

Fee	Drinking Water Operator Fee	Operators-in-Training		Wastewater Operator Fee	Water Quality Analyst
		Drinking Water OIT	Wastewater OIT		
Exam	\$75	\$30 (all 4 exams)	\$30 (all 4 exams)	\$75	\$75
Licence	\$115	\$30	N/A	\$115	\$115
Licence Renewal	\$115	\$115	\$75	\$75	\$115
Late Renewal	\$25	N/A	N/A	N/A	\$25
Replacement Licence	\$75	\$75	\$75	\$75	
Facility Classification*	\$150	N/A	N/A	N/A	N/A
Course Assessment**	\$50 + \$30 per CEU	N/A	N/A	N/A	\$50 + \$30 per CEU

* paid by owner ** paid by course provider

The appropriate fees must be enclosed with applications. The *Guide to Completing Ministry of Environment Water and Wastewater Operator Certification and Facility Classification Forms* provides further detail on making payment.

9 Preparing for a Licence Exam – Study Guides

The following pages contain a list of material to assist operators to prepare for a licence exam. Operators should refer to the *Resource Guide for Water and Wastewater Operators* for additional information on study guides, course content, trainers, etc, which can be obtained from the website of the Certification Administrator (see section 11 of this guide).

The *Water Treatment Need to Know Criteria* guide is intended to help trainers, supervisors and operators determine what topics to review in order to prepare for a specific licence exam. The guide indicates the level of knowledge expected for the different topics covered in the different levels of licence exams.

The office of the Certification Administrator also has a video to help operators prepare to write exams. The video is titled "*Secrets to Success: How To Prepare For Operator Certification*", and is designed for operators who have not written exams for many years. It provides tips on how to study, and how to write exams. Supervisors may borrow the video from the Certification Office.

To obtain the Resource Guide, Need-To-Know guide, or to borrow the *Secrets to Success* video (all free of charge), contact the Certification Office (see section 11 of this guide).

9.1 Study materials available through the Certification Office

The following study materials can be obtained through the office of the Certification Administrator. You can also obtain from the Certification Administrator a list of Recommended Study Aids, or secure a copy from their website (see Section 10 for contact information).

- Operator-In-Training Examination Study Guide \$30.00
Prepared by Ontario Municipal Water Assoc. & Ministry of the Environment.
Study guide covers all four categories in one manual.

- Alberta Water & Wastewater Operations Manual Level 1 \$85.00
Prepared by Western Canada Water & Wastewater Assoc.
Manual covers all four level 1 categories (WT, WD, WWT, and WWC)

- Alberta Water & Wastewater Operations Manual Level 2 \$85.00
Prepared by Western Canada Water & Wastewater Assoc.
Manual covers Water Treatment and Wastewater Treatment level 2

Sample Examination Questions:

- Operator Certification Study Guide \$40.00
Prepared by the American Water Works Assoc. (AWWA)
Guide covers sample questions, level 1-4, in Water Treatment & Water Distribution

- Certification Study Guide for Wastewater Treatment Personnel \$50.00
Prepared by the Water Environment Federation (WEF)
Guide covers sample questions, level 1-4, in Wastewater Treatment

- Certification Study Guide for Collection Systems Personnel \$50.00
Prepared by the Water Environment Federation (WEF)
Guide covers sample questions, level 1-4, in Wastewater Collection

Ministry of the Environment Study Material

- Mathematics for Water & Wastewater Operations \$25.00
- Operation of Small Drinking-Water Systems \$80.25
(correspondence course)

California State University Correspondence Courses

- California State offers a variety of water and wastewater correspondence courses for operators and managers. Upon completion of each course you will receive a Certificate of Completion plus earn Continuing Education units (CEUs), per course. For further information contact California State University (CSU), at (916)278-6142 or visit their website at <http://www.owp.csus.edu>

Additional study aids are listed on the *Recommended Study Aid* document available on the Web site of the office of the Certification Administrator. See section 11 of this guide for contact information.

9.2 Application Forms

When applying for exams or certificates, please ensure that all documentation, fees, and verification forms are fully completed. Verification of employment (experience forms) must be signed by the operator's manager or the overall responsible operator.

Type or print all information clearly, using a pen only. Please keep a copy of all forms submitted. Application forms, supporting documents and fees are to be forwarded to the office of the Certification Administrator.

10 How To Obtain More Information

For more information, a copy of various resources such the Resource Guide, Need-To-Know guides, Forms and the *Guide to Completing Ministry of Environment Water and Wastewater Operator Certification and Facility Classification Forms*, O. Reg. 129/04, or to order manuals, please contact the office of the Certification Administrator:

Ontario Environmental Training Consortium (OETC)

37 George Street North, Suite 206

Brampton, Ontario

L6X 1R5

Call (905) 796-2851

Fax (905) 796-8744

Website: www.oetc.on.ca

E-mail: info@oetc.on.ca

